

ABSTRACT

A semiconductor laser device emitting a laser beam having stable emitting wavelength and a multimode spectrum is provided.

- 5 The semiconductor laser device is a Fabry-Perot type semiconductor laser device having a layer structure including an active layer of a quantum well structure, and emitting a laser beam having wavelength stabilized by an action of return light and having a multimode spectrum, wherein each well layer satisfies
- 10 relation:

$$\Gamma/d \leq 1.3 \times 10^{-3} \text{nm}^{-1}$$

where Γ and $d(\text{nm})$ are an optical confinement factor and a thickness of a well layer, respectively.